

**DERWENT- 1999-283759****ACC-NO:****DERWENT- 199925****WEEK:****COPYRIGHT 1999 DERWENT INFORMATION LTD****TITLE:** Electroconductive adhesive for attachment of electronic component to printed circuit board - includes nickel@ particles and lipophilic particles in a resin binder**PATENT-ASSIGNEE: MATSUSHITA DENKI SANGYO KK[MATU]****PRIORITY-DATA: 1997JP-0252308 (September 17, 1997)****PATENT-FAMILY:**

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 11092727 A	April 6, 1999	N/A	007	C09J 009/02

**APPLICATION-DATA:**

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP 11092727A	N/A	1997JP-0252308	September 17, 1997

**INT-CL (IPC): C09C001/04, C09J009/02, C09J011/04, H01L021/60, H05K003/32****ABSTRACTED-PUB-NO: JP 11092727A****BASIC-ABSTRACT:****NOVELTY -** The adhesive agent includes metal particles selected from silver, copper, zinc, tin and iron metals, nickel particles and lipophilic particles in a resin binder.

The lipophilic particle is a resin particle or metals such as silver, copper, zinc, tin or iron. The base metal is heated at a temperature higher than room temperature and a surface oxide film is formed on it. Nickel particles have zinc oxide whiskers or protrusions (3) on their surfaces and have a grain size of 3-20  $\mu$ m. The metal particles have spherical shape with grain size of 3-15  $\mu$ m. The weight ratio of Ni particles to base metal particles is 0.05-0.15, and the ratio of Ni and base metal particles to the total weight of adhesive is 0.75-0.85.

**USE -** For attaching electronic components to printed circuit boards.**ADVANTAGE -** Adhesive agent of low volume resistivity is obtained since contact frequency between nickel particles is high.**DESCRIPTION OF DRAWING -** The figure illustrates the electroconductive adhesive. (1) Nickel particles; (2) Copper particles; (3) Protrusions.**CHOSEN- Dwg.1/2**  
**DRAWING:****TITLE-TERMS: ELECTROCONDUCTING ADHESIVE ATTACH ELECTRONIC COMPONENT PRINT CIRCUIT BOARD**  
**NICKEL@ PARTICLE LIPOPHILIC PARTICLE RESIN BIND****DERWENT-CLASS: A85 G03 L03 U11 V04 X12**